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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,617	03/17/2004	Arthur J. Jur	03-PDA-328(220)	4577

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EXAMINER
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BAUER, SCOTT ALLEN

ART UNIT	PAPER NUMBER
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2836

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/802,617

Applicant(s)

JUR ET AL.

Examiner

Scott Bauer

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/17/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Objections*

1. Claims 5 & 15 is objected to because of the following informalities: Claims 5 & 15 claim that a hollow member is made from fiber reinforced plastic resin, plastic resin coated fabric, vulcanized fabric, **and** fiber reinforced polyester laminate. As recited, the claim is interpreted to mean that the hollow member is constructed of all the materials at once. However, the disclosure does not teach how these materials would be combined together. The Examiner assumes Applicant intended that the hollow member is made from fiber reinforced plastic resin, plastic resin coated fabric, vulcanized fabric, **or** fiber reinforced polyester laminate. Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Young (US 5,414,584) in view of Rosen et al. (US 5,304,761) and further in view of Wilkie, II et al. (US 6,215,654).

4. With regard to Claim 1, Young, in figure 4, teaches a network protector (10) comprising: an enclosure (18); a frame assembly (38) disposed within said enclosure; a plurality of electrical components including a circuit breaker (14) coupled to said frame assembly and having at least one set of main contacts (column 3 lines 29-31) and at least one arc vent (42) associated with set of main contacts; an arc path assembly (78) having a hollow member having at least one open end (82), said hollow member in fluid communication with the arc vent (42); and the hollow member extending beyond the frame assembly (38), whereby arc gasses traveling from said arc chute through said hollow member are exhausted (column 2 lines 7-14).

Young does not teach the use of an arc chute associated with each of the main contacts or that arc gases are exhausted from the breaker, into an enclosure.

Rosen et al., in Figure 2, teaches a circuit breaker containing main contacts wherein an arc chute (32) is associated with each main contact (column 3 lines 15-24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Young with Rosen et al., by placing an arc chute as taught by Rosen et al. between the main contact, and contact vent (42) of Young, for the purpose of extinguishing the arc before it enters and damages the hollow member (78).

Wilkie, II et al., in figure 6, teaches a switchgear assembly which contains circuit breakers that vent arc gases (43) into the switchgear enclosure from vents (41).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Young in view of Rosen et al. with Wilkie, II et al., by placing the network protector taught by Young in view of Rosen et al. in the switchgear assembly taught by Wilkie, II et al., for the purpose of centralizing the breakers of many networks together thus reducing maintenance time and reducing cost.

In the network device taught by Young in view of Rosen and further in view of Wilkie, II et al., the circuit breaker enclosure taught by Young and containing the arc chutes taught by Rosen et al. are installed in a cell (11) of the switchgear taught by Wilkie, II et al. in such a way that the arc chutes extend vertically and the hollow member extends horizontally. Further, the gases vent from the enclosure taught by Young into the switchgear enclosure taught by Wilkie, II et al.

5. With regard to Claim 11, Young in view of Rosen et al. and further in view of Wilkie, II et al. discloses an arc path assembly for a network protector, said network protector having a plurality of electrical components including a circuit breaker disposed on a frame assembly within an enclosure, said circuit breaker having at least one set of main contacts and at least one generally vertical arc chute associated with said at least one set of main contacts, said arc path assembly comprising: a hollow member having at least one open end and at least one side opening; said side opening structured to be coupled to said at least one arc chute; and said at least one open end extending beyond said frame assembly, whereby arc gasses traveling from said arc chutes pass

through said hollow member and are exhausted into said enclosure. The reasons for combining have been stated above for Claim 1.

6. With regard to Claims 2 & 12, Young in view of Rosen et al. and further in view of Wilkie, II et al. discloses the network protector of Claims 1 & 11. Young in view of Rosen et al. further discloses that at least one arc chute extends generally vertically; and the hollow member (78) extends generally horizontally. It is noted that as shown in Figure 4, the hollow member extends vertically and the arc chute extends horizontally. However, without affecting the operation of the device, the enclosure can be installed in such a way as to allow the arc chute to extend vertically and the hollow member to extend horizontally.

7. With regard to Claim 3 & 13, Young in view of Rosen et al. and further in view of Wilkie, II et al. discloses the network protector of Claims 2 & 12. Rosen et al. further discloses that the circuit breaker includes three sets of main contacts and said at least one arc chute includes three arc chutes, one arc chute being associated with each set of main contacts (column 3 lines 15-24). Young further discloses that the hollow member (78) being coupled to said circuit breaker (14) and wherein said hollow member (78) is in fluid communication with each arc vent (42) and thus in fluid connection with each arc chute (32 as taught by Rosen et al.).

8. With regard to Claims 4, 10, 14 & 20, Young in view of Rosen et al. and further in view of Wilkie, II et al., discloses the network protector of Claims 1, 3, 11 & 13. Young further discloses that the hollow member is made from a non-conductive material (column 3 lines 32-36).

9. With regard to Claim 5 & 15, Young in view of Rosen et al. and further in view of Wilkie, II et al. discloses the network protector of Claim 5 & 15 except that the hollow member (78) is made from Lexan<sup>®</sup>, which is a glass fiber reinforced plastic resin.

10. With regard to Claim 6, 8, 16 & 18, Young in view of Rosen et al. and further in view of Wilkie, II et al. discloses the network protector of Claims 1, 5, 11 & 15. Young further discloses that the hollow member includes two open ends (90), each open end extending beyond said frame assembly (38).

11. With regard to Claim 7, 9, 17 & 19, Young in view of Rosen et al. and further in view of Wilkie, II et al. discloses the network protector of Claims 6, 8, 16 & 18. Young further discloses that each open end is disposed within the enclosure.

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yarrick (US 3,025,376), in figure 3, discloses an arc chute for

circuit breakers wherein arc gases travel up an arc chute that extends vertically, the gases then enter a hollow space which extends horizontally extending from the frame of the contact. The hollow member is open at each end.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Bauer whose telephone number is 571-272-5986. The examiner can normally be reached on M-F 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 571-272-2058. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SAB  
01 FEB 2006



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PRIMARY EXAMINER